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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

Barry Rosen,

Plaintiff,

vs.

eBay, Inc., and Does 1 through 10,

Defendants.

Case No. CV13-06801 MWF (Ex)

**Declaration of David M. Sterling in
Support of Plaintiff Barry Rosen's
Motion for Summary Judgment re
Liability**

Date: November 3, 2014

Time: 10:00 a.m.

Dept.: 1600

Contents

Background and Qualifications	3
Previous Expert Witness Background	4
<i>Recent subjects of expert opinion</i>	<i>4</i>
<i>Compensation</i>	<i>5</i>
<i>Materials Considered</i>	<i>5</i>
<i>Exhibits</i>	<i>6</i>
Evaluation Details	6
<i>Review Detail</i>	<i>6</i>
<i>Protection of Images</i>	<i>7</i>
<i>The logging of access of image files</i>	<i>9</i>
Distribution of Content to Third Parties	9
[REDACTED]	9
[REDACTED]	11

1 I, David R. Sterling, declare:

- 2 1. I have personal knowledge of the following facts and could and would testify
3 thereto if called as a witness in this case. I am the CEO of Sterling International
4 Consulting Group and I have been retained to perform an objective technical and
5 operational evaluation of the methods used by eBay, Inc. with respect to the
6 website eBay.com in the management of images used for the posting of auctions
7 on the site.
- 8 2. In my capacity as a technology and subject matter expert, I have been asked to
9 review the materials provided by counsel as well as examine the operation of the
10 eBay site and two related sites, Terapeak and Worthpoint.

11 **Background and Qualifications**

- 12 3. My education, experience, and qualifications, including a list of my publications,
13 are set forth in my curriculum vitae, attached hereto as Exhibit A. My opinions, as
14 expressed in this report, are based on my education, career, and relevant
15 experience, as well as the information reviewed.
- 16 4. I am presently the CEO, Chief Software Architect and Executive Consultant of
17 Sterling International Consulting Group, a professional services firm I founded in
18 1984.
- 19 5. I began my career in the late 1970's and have been involved in the information
20 technology field for my entire professional life. I began my career in 1976 working
21 at Dartmouth College as a programmer and later moved on to systems and database
22 development until founding the firm. Since establishing our first large client
23 (Digital Equipment Corporation), I have been a hands on consultant providing
24 services worldwide and have been an advisor to Accenture, Microsoft, Dell and
EMC.
6. I have spent most of my career in the areas of software development and design
and program management covering multiple industries including manufacturing,

1 shipping & logistics, defense systems, telecommunications, cable TV systems,
2 banking, brokerage, life sciences and software development firms.

- 3 7. I am the author of multiple white papers, primers and books relating to Microsoft
4 products (not related to the issues at hand in this case).

5 **Previous Expert Witness Background**

- 6 8. In the legal field, I have provided legal expert services in multiple cases over the
7 past 10 years in patent litigation, trade secrets, intellectual property, digital theft
8 and software piracy – in the last five years these include:

9 **Recent subjects of expert opinion**

- 10 a. *Atrion vs. Marbleplay* – Subject matter expert to perform a complete
11 technical review of a public facing web site developed using Microsoft
12 SharePoint Technologies. Representing Marbleplay, included development
13 of a complete technical report encompassing all issues found within the
14 deployment of the SharePoint platform, development and deployment of the
15 SharePoint site and assessment of 3rd party custom code provided – Sulimani
16 Law Firm, 7/14
- 17 b. Criminal Defense - Review of military case (US Marine Corps) involving
18 alleged theft of confidential material and specifically, the tracking methods
19 used as evidentiary proof of the allegations - Defense Counsel, Marine
20 Corps - 12/13
- 21 c. *Secured Mail Solutions LLC v. Advanced Image Direct LLC, et al.* -
22 Representing the plaintiff to provide an expert report based on the use of
23 patented processes involving the use of mail and barcode systems -
24 O'Melveny & Meyers, LLP - 09/13 – 12/13
- d. *Air Express Int'l (DHL) v. Log-Net* - Representing the plaintiff and counter-
defendant to provide expert opinion on the use of trade secrets and pirating
software - Greenberg Traurig, LLP - 09/13 - still active.

e. *Janalent v. AvePoint* - Representing the plaintiff to provide expert rebuttal opinion and deposition on use of and products integrating with Microsoft SharePoint technologies - Alston + Bird, LLP - 07/11-08/11

f. *Netscape v. ValueClick* - Representing the defendant, provided expert opinion involving a Patent infringement case involving a technical patent on 'cookie' technology - Bryan Cave, LLP – 03/09-11/09.

Compensation

9. For this case I have been retained by Barry Rose specifically for my technical background and knowledge of web sites and eCommerce technologies. For the review and production of this report, I am being compensated at a rate of \$250 per hour.

Materials Considered

10. For the background on this report, I was provided with the following documents:

- Exhibit 161
- Exhibit 162
- Exhibit 170
- Rosen-02666-02669.pdf
- Rosen-02670-02675.pdf
- Exhibit 171
- Exhibits 137-144
- Exhibits-88-91
- Exhibits 104-106
- eBay's Supp. Responses to Rosen's Second Demand for Production of Documents
- eBay's Exhibit B to eBay's Supplemental Responses to Interrogatories
- [REDACTED] and related documents (eBay document nos. 2047- 2100)

11. Each of these provide screen shots that indicate time.

12. In addition, I performed an operational review of my own in which I was able to observe the behavior of the eBay auction site and the reporting of the Terapeak and

1 WorthPoint sites.

- 2 13. I am also relying my own experience and training with over 30 years of technical
3 development and systems architecture, over 16 years in the development of web
4 based systems and 16 years in development, user experience design, performance,
5 monitoring and security of intranet, internet, eCommerce and high-volume public
6 facing web sites.

7 **Exhibits**

- 8 14. For support of the observations and conclusions made in this report, attached are
9 supporting exhibits in the form of ‘Screen Shots’ of site pages and image
10 properties. All screen shots are ‘full screen’ to enable the display of the current
11 date and time.

12 **Evaluation Details**

13 **Review Detail**

- 14 15. To perform the review, I engaged in a step by step examination of an item for sale
15 within the eBay site to see how it deals with images that are included with listings
16 (auctions). From this review, it was apparent that when a listing is created, eBay
17 stores uploaded images to an “Image Server.” In addition, it creates a ‘thumbnail
18 image” (from the primary image uploaded to the listing) on a separate server.
19 16. Once a listing is created, the item title, a link to the item detail, and a thumbnail
20 image are added to the eBay Search Index. After a period of time, larger search
21 engines, such as Google and content servers used to speed network delivery,
22 collect URL’s and images through “caching.” This is demonstrated in Exhibit B.
23 17. Barry Rosen performed several checks on listings he had instructed eBay to
24 remove due to alleged copyright infringement. These tests performed on different
items indicated that:
- a. A listing reported to eBay on 11/17/13 was taken down on 11/18/13, but the
alleged infringing image was still searchable on both eBay and Google on

1 11/20/13 and was displayed related to a purchase made on 12/3/13. This can
2 be seen in exhibits 137-144. A person skilled in the art would concur with
3 the findings based on the information provided, that eBay is still using the
4 images after the listings have been removed and that the images are
5 available to the entire world and are findable via search engines like Google.

6 b. A listing reported to eBay on 9/27/13 was still available on 11/20/13. A
7 person skilled in the art would concur with the findings based on the
8 information provided that the item had not been taken down in response to a
9 notification. Additionally, a person skilled in the art would conclude that if
10 the sale had ended, the data and associated images would have been
provided to [REDACTED].

11 18. In the above examples, along with a validation of the setup of a listing within
12 eBay, it is clear that the management of images within eBay is not consistent.
13 When access to listings is removed from auction lists, the related image files are
14 not removed immediately. This indicates either a manual or selective removal
process and is likely not tied to the listing removal process.

15 19. In addition, it appears that thumbnails created by eBay in conjunction with the
16 listing creation are included in search, even when an item has been removed. This
17 would indicate a practice of “leaving” closed or removed listings available through
18 search engines, such as Google, to generate sales. When a user clicks on a non-
19 existent listing, they are presented with “similar” results. A common term for this
in the industry is called “cross selling.”

20 20. As a person skilled in the art would know, completely removing a listing requires
21 more than just disabling the primary listing. As indicated in Exhibit B, images
22 would need to be removed from multiple locations, to include any cache system
23 and any thumbnails that might have been associated with search indexes.

24 **Protection of Images**

- 1 21. Another aspect of the eBay.com website demonstrated by Exhibit C is that the
2 eBay site does not provide protection on images it displays. In addition to being
3 able to copy the URL and open the image alone in a separate browser window, it
4 provides the option to search for it in Google as shown in Exhibit D. Clicking the
5 Search Google link automatically provides the “metadata” for search, in this case
6 the name of the person associated with the picture and provides results based on
7 that search as shown in Exhibit E.
- 8 22. A person skilled in the art would know that if there were even the potential of an
9 image being taken from the site, there are a multitude of way in which images can
10 be “masked” so they cannot be downloaded or easily passed around. A quick web
11 search produces pages of ways in which to accomplish this – this one article lists
12 ten (10): <http://www.webresourcesdepot.com/10-ways-to-protect-images-from-being-stolen/>.
- 13 23. While it is not possible to prevent an image from being unmasked, additional
14 methods, most notably “water marking” can be used. Since eBay is already
15 manipulating images to generate “thumbnail” images, water marking the original
16 image would be a simple step. Again, while not 100% perfect, a watermark is
17 extremely difficult to remove and would permanently damage it so that it would be
18 of little use. I am aware that eBay at one time did in fact do watermarking, but
19 apparently no longer does it.
- 20 24. In protection of copyrighted material, simply applying masking techniques and
21 other deterrents is not enough. As a person skilled in the art would know,
22 providing compliance on copyrighted material also requires due diligence on the
23 part of the provider to ensure that images have traceability. This would mean log
24 information and tracking within the image server or a direct mechanism built that
would immediately remove images associated with a listing, including cache and
search.

The logging of access of image files

25. In eBay's Supplemental Responses to Interrogatories dated August 18, 2014, eBay contends that its system does not provide a way to log activity of access to a particular image. A person skilled in the art knows this is technically not true. All URL requests are always logged by the system in which the "GET" request is performed. Furthermore, these logs are necessary to eBay's operation and troubleshooting of operational issues, such as broken image links, 404 pages, etc. eBay's claim that it does not have the ability to generate logs of activity with respect to the accessing of images on its system is not true.

26. I also reviewed Exhibit B to eBay's Supplemental Responses to Interrogatories, which shows views of listings (shown as view_item_count). In order to produce such view information for listings, eBay would have to have underling logs for such information.

27. Removal of an image is yet another matter and it does not matter whether a user has clicked on it or not. The fact that the image URL can be captured and easily reused, emailed, etc. outside of the context of the listing opens the door to widespread distribution.

Distribution of Content to Third Parties

28. In addition to the eBay system itself, I researched two "consumers" of eBay data -- Terapeak and Worthpoint. Terapeak bills itself as an eBay research company that is a provider of analytics based on data it receives from eBay via a direct contractual relationship with eBay. Customers of Terapeak can obtain reports on virtually all of the auctions that have closed. Worthpoint provides an auction history on items that have been sold on eBay. Customers can view when an item was last sold and how much it sold for.

Terapeak

29. Terapeak's system imports data from eBay that is useful for the recording and

1 analysis of individual auctions that have closed. This includes detailed information
2 about the transaction including the ending date and ending price. It provides a
3 detail search capability by subject/title and provides a summary list of the
4 auction(s) found as shown in Exhibit F. In addition to the listing, it also provides a
5 direct link back to original eBay listing, even though it has been closed. The
6 images shown in these listings use links back to the thumbnail images stored on
eBay, also indicated by the display of the image URL in Exhibit F.

7 30.

[REDACTED]

10 31.

[REDACTED]

14 32.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

1 33. Based on my review of the information available on Terapeak's website, it is clear
2 to me that eBay allows Terapeak access to its data files relating to auctions on
3 eBay.com, including access to image files associated with such auctions. In fact, it
4 appears that eBay distributes such data files, including image files, to Terapeak.

5 34. [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]

14 **Worthpoint**

15 35. Worthpoint receives its auction information from Terapeak and uses this
16 information to create a compilation of information about a particular product or
17 item. Using historical information from sales on eBay, it provides users with a
18 quick view of how much an item last sold for. On detail display of an item it is
19 clear that the image is stored on the Worthpoint servers (which appear to be hosted
20 with Amazon's hosting service) as shown in Exhibit G, which would indicate a
21 duplication of the image from eBay's servers. This is further evidenced by a
22 display of the detail of the image in which the image is shown as an eBay image,
23 copyrighted by Worthpoint and stored on the Worthpoint servers as shown in
24 Exhibit H.

36. The relationship between Terapeak and Worthpoint is a partnership in which eBay
provides data to Terapeak which repackages it to Worthpoint. According to the



David M. Sterling

Exhibit A

David M. Sterling – Consultant, Architect, CSA, Legal Expert

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Abbreviated Professional Background and Technical Inventory Profile

Profile Summary

- Enterprise architect/professional services consultant on organization wide information systems, cloud based solutions, data integration and SOA/SaaS information architecture in multiple technologies and a specialist in business/IT integration, organizational transformation and information systems development
- Information Architect and specialist in Governance, Business Continuity Planning and Disaster Recovery Planning
- Broad technical knowledge across multiple platforms (Microsoft, Open Source, J2EE, etc.) and databases (SQL Server, Sybase, Oracle)
- SharePoint Architect (on premise and Office 365) in analysis, design, deployment, migration, communications and governance
- Technical training program designer, expert instructor and author
- Legal expert and technical discovery analyst (patent, infringement, intellectual property, trade secrets and code reviews)

Specialties: Global architecture, information architecture & management, cloud based systems (including hybrid models), business continuity, disaster recovery, collaboration and document management systems and Microsoft enterprise and SharePoint technologies. Enterprise information architect in all technologies; architect for mid to very large scale projects including global & multi-continent.

Sterling International Consulting Group – CEO, Executive Consultant, Chief Software Architect & Legal Expert

SICG CEO and active consultant and coordinator of the SICG team providing professional services in architecture and design of enterprise information management systems, development and deployment of collaboration systems, global program/project implementation, business development and global execution and implementation of emerging technologies.

Technical consultant in multiple practice areas including information architecture, systems implementation, business intelligence, governance planning and execution, business continuity planning, disaster recovery planning, global program and project management, enterprise content management and document control systems. Specialist and Adviser in the architecture and use of Microsoft enterprise technologies including noted expert in SharePoint. Architect in building end-to-end solutions including the overall architecture, technical and business analysis, information security, systems integration, enterprise-wide deployment planning and application development. Skilled in multiple disciplines, methodologies and technologies, author of both whitepapers and books and development of training and knowledge transfer programs.

Legal expert in technology for case support, discovery, expert reporting, deposition & testimony in a variety of cases including patents, misappropriation, trade secrets, piracy and intellectual property (representing both plaintiffs and defendants) – see *Legal Expert Engagements*.

Technologies & Disciplines

- Technical architecture, infrastructure development, business continuity planning, disaster recovery planning, management consulting, roadmap development, governance development and execution, program and project management, on premise/cloud and hybrid solutions development, big data solutions, team management and C-Level consulting. Microsoft enterprise systems specialist including Windows Server, SharePoint, SQL Server, Active Directory, Exchange and Office 365. Solutions designer, developer and trainer in .NET, TFS, Visual Studio, SQL (including SSRS, SSAS, SSIS), XML, XHTML, TransactSQL, App Development, CSS3, HTML5, jQuery, JavaScript, JSON, OAuth, oData, AJAX, and multiple CMS (WordPress, etc.) - (See *Technical Inventory*)

Legal Expert Engagements

Over 30 years in the technical field encompassing proprietary software design and development, systems implementation, project management, collaboration systems and ECommerce. Exceptional at explanation of highly technical matters in lay terms and concepts. Expert at teaching through generalized, easy to understand examples and analogies.

Sulimani Law Firm – Legal Expert/Technical Review

7/14: Review and development of an expert report on the implementation and current state of a public facing SharePoint site used for a nationally known Sports Social Media site. Included a detailed analysis of the user experience of the site (front end), evaluation of security, site layout, content access, login/out features, etc. Systems evaluation (back end) included implementation (settings, permissions, accounts, etc.), best practice application, design methods used, coding methods used, security as implemented and overall health of the environment.

Captain A. Louis Evans, Defense Counsel, Marine Corps Defense Services Organization-Eastern Region, Camp Lejeune, NC - Technical Expert Consultant

12/13: Review of military case (US Marine Corps) involving alleged theft of confidential material and specifically, the tracking methods used as evidentiary proof of the allegations. Representing the defense, a Motion to Compel was filed with the Military Court to qualify my production as an expert consultant. Based on contrary information provided, Attorney was able to secure a Pre-Trial agreement enabling the trial to be dismissed.

O'Melveny & Meyers, LLP - Legal Expert

09/13 – 01/14: Representing the plaintiff to provide an expert report based on the use of patented processes involving the use of mail and barcode systems. Efforts included development of the primary reports and detailed source code discovery and review of all documentation provided by the court and depositions by each of the defendants. After report presentation on both sides, all defendants settled.

Greenberg Traurig, LLP - Legal Expert

09/13 - still active: Representing the plaintiff and as a defendant in counter claims to provide expert opinion on the use of trade secrets and pirating software. Efforts included extensive research of the court documents and evidence provided and development of an expert report. Expert report considered strong enough by counsel that it will be presented as direct evidence for Motion to Dismiss.

Alston + Bird, LLP - Legal Expert

07/11-08/11: Representing the plaintiff to provide expert rebuttal opinion and deposition on use of and products integrating with Microsoft SharePoint technologies. The trade secret case was based on 'commonality and availability' of technologies in the case timeframe. Efforts included development of the primary report, rebuttal report and deposition in the case.

Bryan Cave, LLP – Legal Expert

03/09-11/09: Representing the defendant, provided expert opinion involving a Patent infringement case involving a technical patent on 'cookie' technology. Representing the defense, I provided expert technical opinion and rebuttal reports around "Markman" (terminology and intent) and worked with the attorneys in preparation and interpretation of briefs, depositions and rebuttals (prepared for but did not provide a deposition).

ThinkFire Services USA, LTD – Product and Process Patent Review

02/07: Representing the defendant, developed an expert report in review of multiple product and process patents to evaluate the uniqueness, ability to prove claims, related industry standards and general use.

Baker & Daniels, LLP – Subject Matter Expert, Ecommerce Systems/Patents

12/04-02/06: Industry eCommerce SME; Document Discovery Project Manager, evidence team coordinator – Representing plaintiff, provided direct evidence discovery in preparation for a patent suit including organization and selection of discovery team technical members, supervising and overall technical expert/adviser, extensive code reviews of multiple platforms, compilation of evidentiary facts to prepare the designated testifying expert for trial and summarization of detailed reviews of complete corporate histories in ecommerce development for several of the defendants.

Bose, McKinney & Evans, LLP – Subject Matter Expert, Ecommerce Systems/Patents

12/02-11/04: Representing the plaintiff, provided expert opinion and discovery as an industry SME providing detailed architecture, design and development expertise and analysis for eCommerce platforms (this case moved to Baker & Daniels).

Stevens Financial Group – Legal Expert Services

07/00-08/01: Investigation and comprehensive evaluation and problem determination of a commercial software product designed for consumer loan processing, tracking and payment monitoring. This involved a heavily detailed review of the product, its system specifications, user documentation and expert evaluation of the general product's design, architecture and usability. It also involved a comprehensive review of the vendor's organization, change management, quality assurance practices and design/support capabilities. On the legal end, reviewed and surmised hundreds of pages of court documents, including claims, rebuttals and principal depositions. Formed and managed a team of 3 developers in discovery and fact gathering. Final reporting of legal expert opinion included providing 26 hours of deposition on cause and effect of product usage, summary of cause and effect in the

vendor's handling of the product and related facts that resulted in direct financial losses to SFG and its affiliates. Through 8/01, Adviser to the interim transition management team through chapter 11/reorganization proceedings.

Tultex Corporation – Technical Subject Matter Expert

07/97: Representing the plaintiff, provided expert opinion and testimony on plagiarism of source code in the development of a \$7m distribution facility operational system. Involved code review and analysis for re-use, duplication and functionality mapping.

Recent Engagements

Senior Consultant – Client: Hexacorp/Axalta Coating Systems

2/14 – Present: Architecture and infrastructure platform review and rebuild of multiple environments providing a global collaboration solution on the Microsoft stack as a new platform to migrate and retire existing Lotus Notes systems. Included a complete review of the existing 'trashed' deployments, revamping and providing design documentation and recommendations, complete build out of new/replacement environments in the US, Germany and development environment using Azure, development of extensive documentation to provide for build books, disaster recovery and current/future knowledge transfer.

Technologies: Global technical integration architecture, technical project management, enterprise systems planning, SharePoint 2013, Windows Server 2012, SQL Server 2012 (including Clustering/Mirroring/AlwaysOn), Office Web Apps 2013, Workflow Manager, Data Protection Manager 2012 R2, Vendor integration

Senior Consultant – Client: Dataglove/City of Dayton

2/14: Review, evaluation and development of a multi-year technical roadmap for the City of Dayton, OH to accomplish the long term needs to upgrade, consolidate and integrate multiple collaboration platforms. This included evaluation and inclusion of multiple platform technologies – Active Directory, Exchange, Lync, SharePoint and Office.

Senior Consultant – Client: Microsoft

5/13 – 1/14: Architect and designer of the infrastructure and solutions platform for a global validated SharePoint deployment to support Bausch & Lomb's Clinical Trials, Quality & Regulatory compliance efforts. As the primary contributor on the project, it is worth noting that this major initiative for B+L gave a *top box rating* in all areas including areas handled by myself - planning, design, capacity, performance, extensive knowledge transfer across the organization, disaster recovery and business continuity planning. Included global infrastructure design and guidance on the use and deployment of SharePoint 2010/SharePoint 2013 and the implementation of a solutions platform to support the NextDocs and Bioclinica applications; development and presentation of workshops in capacity planning, monitoring and performance across the entire product set (SharePoint 2013, SQL Server 2012, etc.); development of client workshops (optimization and performance) and the logical and physical designs of the environment. Working with the vendors in managing project schedules and client needs; development of infrastructure governance, business continuity and disaster recovery plan.

Technologies: SharePoint 2010/2013, SharePoint Designer, Windows Server 2012, SQL Server 2008 R2, SQL Server 2012, SQL Mirroring & Clustering, Office Web Apps 2013, Data Protection Manager 2012 R2, Vendor integration, WAN/LAN performance optimization

Solution Architect & Adviser – Client: North State

6/13 – 11/13: Architecture and UI/UX development of a new communications intranet for North State for SharePoint 2010 implemented to support SharePoint 2013 for an enterprise wide upgrade in 2014. As a new corporate wide tool, the intranet is designed to provide make standard resources available and provide new communications features to the entire distributed workforce. Development included cross coordination between SICC teams in Costa Rica and Moldova and extensive knowledge transfer (and a few formal training classes) to North State developers and administrators.

Technologies: SharePoint 2010/2013, Visual Studio 2012/2013, SharePoint Designer, Windows Server 2008/2012, SQL Server 2008 R2 & 2012 R2.

Architect/Adviser – Client: Atlanta Housing Authority

2/13 – 10/13: Architecture and development of an extranet "portal" referral tracking system using SharePoint as the platform. The overall system integrates a back-end real estate management system with external agencies to provide participant referrals to various programs (training, education, drug rehab and other services) tracking original request and follow up reporting. Includes a completely customized user experience with security management, configuration management for provisioning, automated management for documents and referrals inbound/outbound and secured WCF services for management data.

Technologies: WCF, SharePoint 2010/2013, SharePoint Designer, Nintex, KnowledgeLake, Yardi, Windows Server 2008, SQL Server 2008 R2, SQL Mirroring, Cloud based Disaster Recovery, SharePoint Cloud Hybrid Solutions

Architect/Adviser – Client: American Homes 4 Rent

2/13 – 8/13: Architecture and development of a custom integration between Dynamics CRM and SharePoint for the management of documents. This included a completely customized & automated site & document structure provisioning, a custom file upload process (through both CRM and SharePoint with metadata cross referencing and WCF services to maintenance of CRM/SharePoint metadata. This has also included the development of the UI/UX interface customized for both look & feel and usability.

Technologies: WCF, SharePoint 2010/2013, SharePoint Designer, Nintex, Azure, Windows Server 2012, SQL Server 2012, SQL Mirroring, Cloud based Disaster Recovery, SharePoint Cloud Hybrid Solutions, Microsoft CRM Online

Solutions Developer – Client: Eli Lilly

4/13-5/13: Extensive development of solutions and controls for both SharePoint 2010 and SharePoint 2013. Included heavy work in .NET 2012 solutions to support a 'home grown' based CMS overlay for SharePoint 2010 and extensive UX/UI development of Display Templates and components for SharePoint 2013.

Technologies: SharePoint 2010/2013, Visual Studio 2012, WCF, .NET 4.5, C#, CSS, HTML5, JavaScript

Adviser – Client: Investment Firms/Speculators – Multiple (Confidential)

12/12-1/13: Providing Advisory services and current market analysis on third party products and services around Microsoft SharePoint and the newest release of 2013. This has included background and analysis on workflow tools, mobile tools and capabilities, maintenance and management products and future market projections.

Technologies: SharePoint 2010/2013, Azure, SharePoint Cloud Hybrid Solutions, multiple 3rd party vendor products

Architect/Adviser – Client: Atlanta Housing Authority

8/12 – 12/12: Development of individual review and recommendations on all aspects of the current operation in an effort to become a 'paperless' environment. This included a complete examination of the entire infrastructure and applications environment, current efforts underway including a mock installation to understand overall applications to be deployed. Review also included project approach and product selection (Yardi Voyager, Yardi Orion, SharePoint 2010, SQL Server, KnowledgeLake and Nintex). Provided an in-depth recommendation report that included coverage of the entire systems architecture (all applications), recommended corporate and user governance and compliance needed for implementation, roadmap for the development of business continuity planning (including how to originate BCP) and roadmap for implementation to ensure organizational and systems readiness. Final deliverables included the Recommendation Report (300+ pages) that included detail breakdowns of each area of risk and included direct mitigation required and/or the exact solution to the issue, and Installation Guide – a comprehensive installation guide for their particular environment and a complete Governance package that covered forming of the committee, roles & responsibilities and an initial Governance Plan for the organization.

Technologies: SharePoint 2010/2013, Nintex, KnowledgeLake, Yardi, Windows Server 2008, SQL Server 2008 R2, SQL Mirroring, Cloud based Disaster Recovery, SharePoint Cloud Hybrid Solutions

Technical Program Design, SharePoint 2010-2013 Development – Client: U.S. Army – US Wide & Italy

07/2012-12/2012: Development of a complete training program in design and development in SharePoint 2010 (and 2013) across the Microsoft technology stack including Windows, SQL Server, SharePoint Server, SharePoint Designer, Visual Studio 2010/2012 using supporting languages (C#, JavaScript, jQuery, PHP, CSS3, HTML5, etc.). An intensive five day program, it covers the setup and deployment, technical architecture and service oriented architecture (SOA), branding and styling within SharePoint, use of master pages and page layouts in ECM and development, multiple development techniques and instruction in the use of SharePoint services like the Business Connectivity Services and Excel Services. Personally proved and executed the program through instruction and classes to multiple divisions in the U.S. Army (top rated across the board). Additional training included coverage of best practices and a detailed overview of SharePoint 2013 concepts for consideration in reusable development.

Technologies: SharePoint 2010, SharePoint Designer 2010, Visual Studio 2010, SharePoint 2013, SharePoint Search, Managed Metadata Services, SharePoint FAST 2010, C#, XML, XHTML, .NET 3.5-4.5, SQL Server 2008 R2, TransactSQL, CSS3, HTML5, jQuery, JSON, OAuth, oData, AJAX, Cloud based solutions

Enterprise Information Systems Architect – Client: Sealy Mattress Company

12/11 – 7/12: Chartered to assess and re-engineer a corporate wide intranet/extranet replacement and initiative to convert a Lotus and Adobe environment to SharePoint technologies from a 'stalled' state due to improper/uninformed direction and problematic deployment from a third party firm. After a very short review, I initiated a complete transformation of the entire business to the SharePoint platform including:

- Re-evaluated expected timelines and re-engineered the solution that reduced an expected 12 month initiative to 3.5 months providing a cost savings of 75% off the planned budget allowing for reallocation to additional consulting services and training
- Established SharePoint Best Practice guidelines, Governance and Security management across the company
- Established installation and maintenance planning including Disaster Recovery and Business Continuity Planning

- Personally designed and deployed the new corporate intranet completely including migration of all existing content; this included branding (a very captivating design), site taxonomy and topology
- Developed several key components to enhance the user experience to include creation of a completely visual interface (a radical departure from prior design)
- Developed and provided the strategy for future corporate collaboration and project management usage of SharePoint
- Worked with developers in development and best practices in the use of SharePoint technologies and re-thinking development and deployment practices
- Evangelizing SharePoint technologies to quickly solve business needs with the business users and developers
- Trained the corporate communications department on the visualization concept of the user interface and use of SharePoint as an effective (and engaging) communication tool
- Provided guidance (and deployed) social networking aspects of SharePoint and worked with the communications group to best leverage the tools
- Launched the process to begin migration off the existing Lotus platform to SharePoint
- Worked with the overall organization to properly align roles and responsibilities to existing personnel, skill sets and best practices.
- Diffused the politically charged environment and 'fear' of the product set left by the third party firm encouraging a cooperative environment between administrators and developers and worked with the managers and communications to 'remove the bad taste' in upper management due to initial failure

Technologies: SharePoint 2010, SharePoint Designer 2010, SharePoint Search 2010, Nintex, Visual Studio 2010, C#, XML, XHTML, .NET 3.5, SQL Server 2008 R2, TransactSQL, CSS3, HTML5, jQuery, OAuth, oData

Global Information Systems and Infrastructure Architect – Client: Microsoft

09/11 – 12/11: Co-architect in the design and infrastructure architecture for Ernest & Young's replacement of Lotus Notes/Domino with the Microsoft stack (SharePoint, Exchange and Linq). One of Microsoft's *largest designs in existence* for SharePoint and cloud based solutions, the architecture and design will provide a 4 9's 7x24 service to over 167,000 internal users and 560,000 external users worldwide (including multiple 'in-country' environments and regulatory requirements). A wholesale transformation for the firm, the design encompassed all communications aspects of the business and its service lines including a complete replacement of the outdated Lotus Notes, Domino and SameTime deployments. The development process included creation, planning and execution of multiple workshops with the client to understand the requirements for the platforms (Development, QA, Staging, Production and Disaster Recovery) covering management of intellectual property, ECM, social connections, team/project collaboration and a global client engagement extranet. The global architecture covers the major deployment of the SharePoint infrastructure as an on-premise solution with future integration capabilities with Office 365 and other cloud technologies.

Technologies: SharePoint 2010, Windows Server 2008, SQL Server 2008 R2, SQL Mirroring, Cloud Services, Cloud based Disaster Recovery, Global Datacenter development, In-country Farm design, FAST Search

Publications and Speaking Engagements

- 05/11: Keynote Speaker – The future of SharePoint (regional Partners consolidated program)
- 01/11: Keynote Speaker – Northern & Central New Jersey SharePoint Users Group
- 01/08: Keynote Speaker – "Set Focus Hosts Renowned Author David Sterling"
- 09/07: Author – Book: *Microsoft Office SharePoint Server 2007 The Complete Reference*
- 03/06: Author – Whitepaper: The Definitive Guide to SharePoint Logging
- 06/05: Author – Whitepaper: Portal Architecture and Deployment Management Methodology
- 07/04: Author – Book: *The MCMS 2002 Primer*
- 03/04-06/04: Co-Author – Book: *Microsoft Press® SharePoint Products and Technologies Resource Kit*
- 03/04: Author/Presenter – WatchIT.com Straight Talk Series program – "Selecting a Portal – The Next Application Platform"
- 03/02: Author/Presenter – WatchIT.com – "Business Intelligence: Best Practices for Successful Project Management" (republished as a 2nd edition, 12/10)

Academics

BSCS Equivalent Northeastern University 1981/CLEP; Executive level training: Management, Organizational Development, Resource Management and Corporate Acquisitions (Kenan-Flagler Business School and Stanford & Harvard extension programs).

Exhibit B

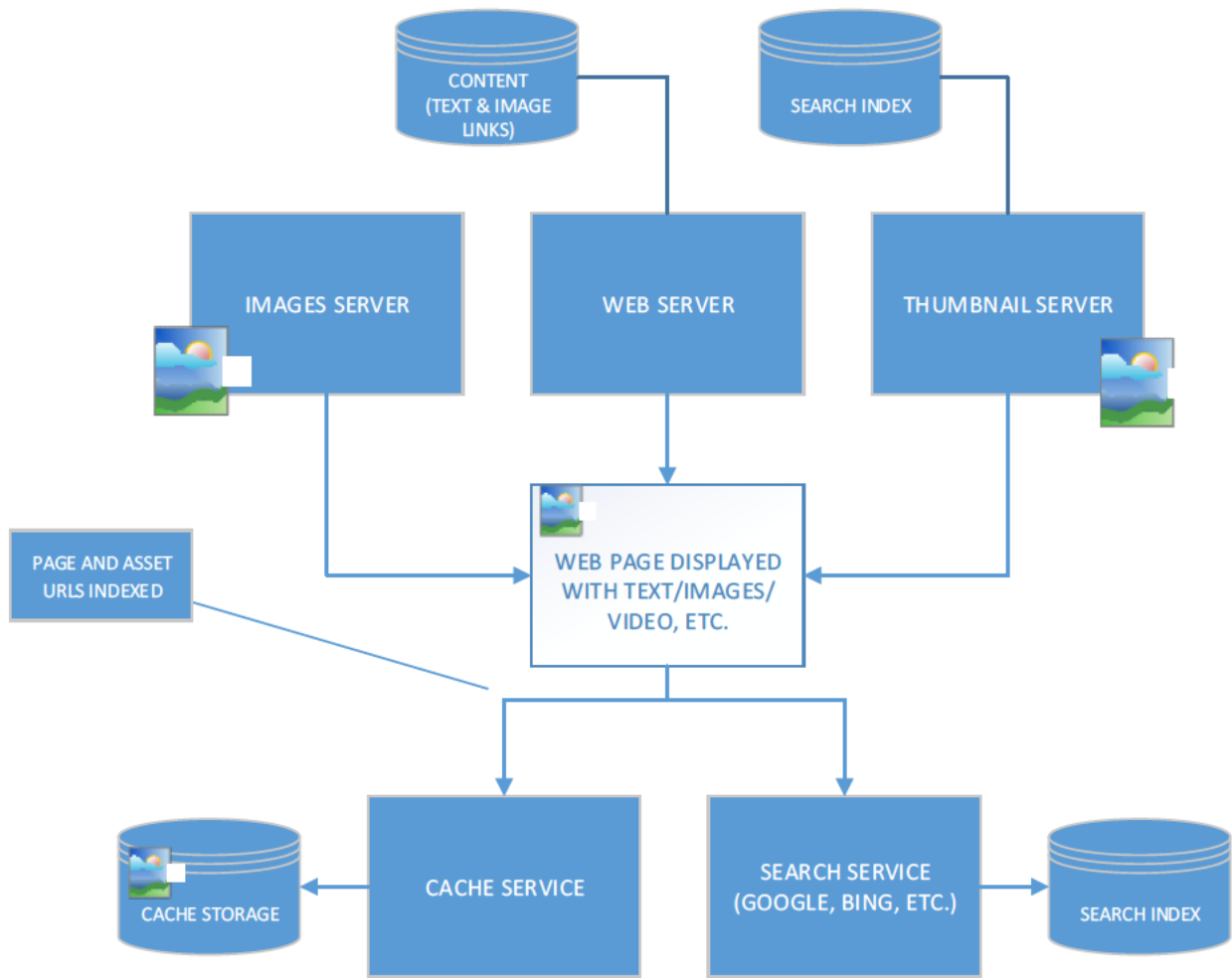


Exhibit C

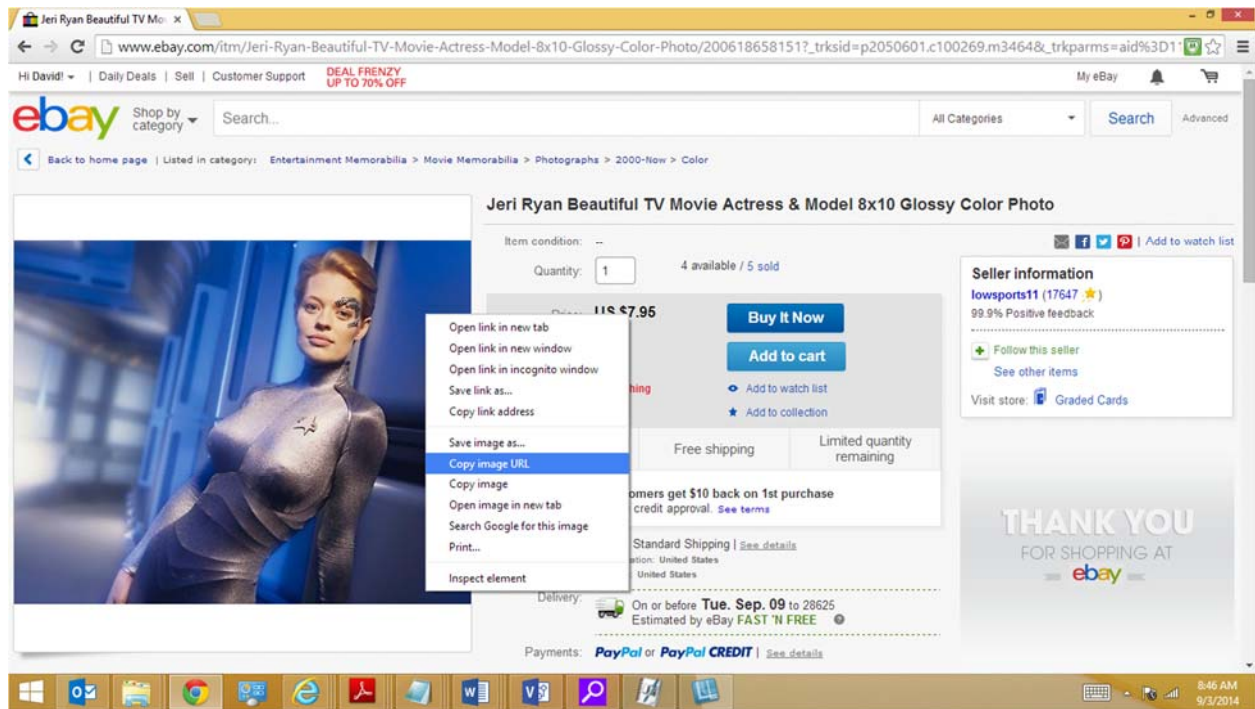


Exhibit D

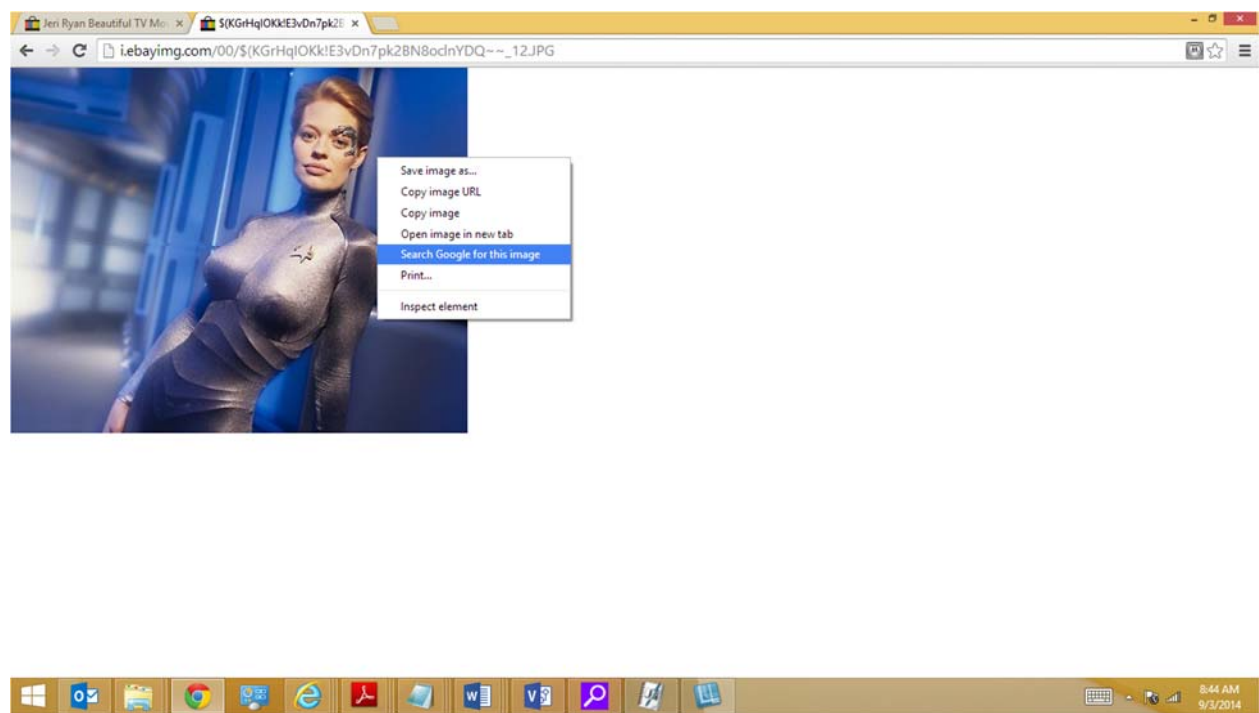


Exhibit E

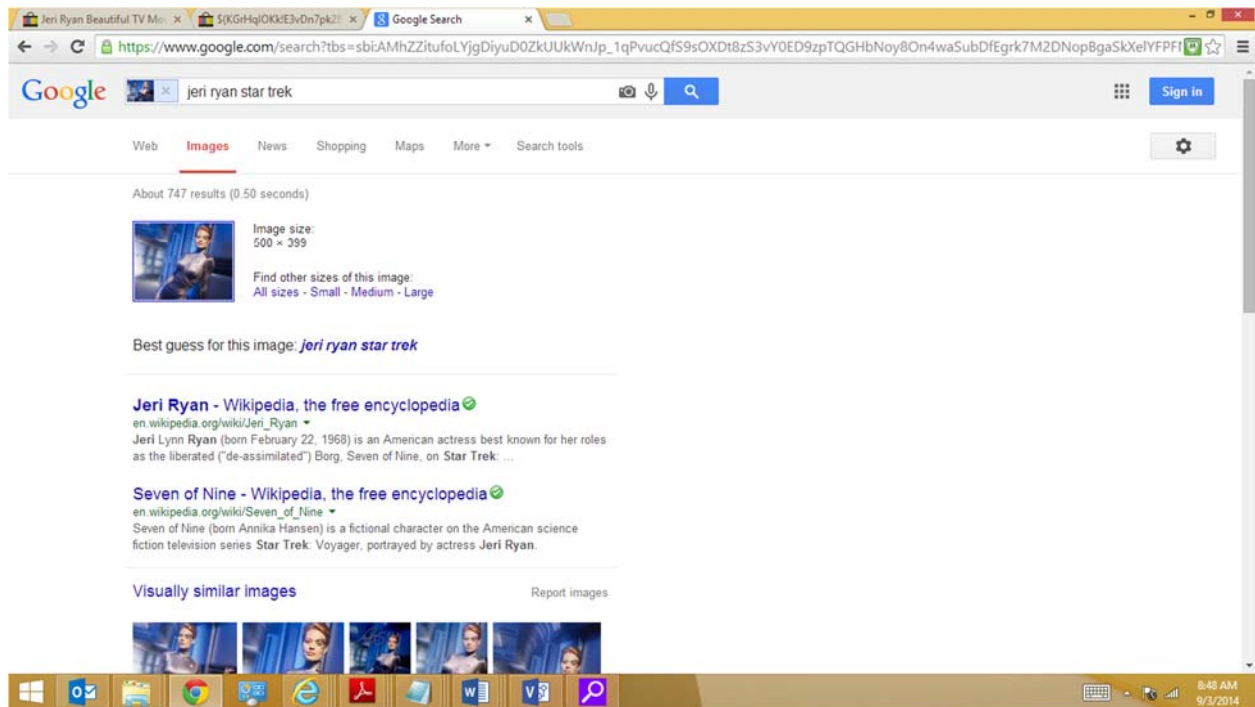


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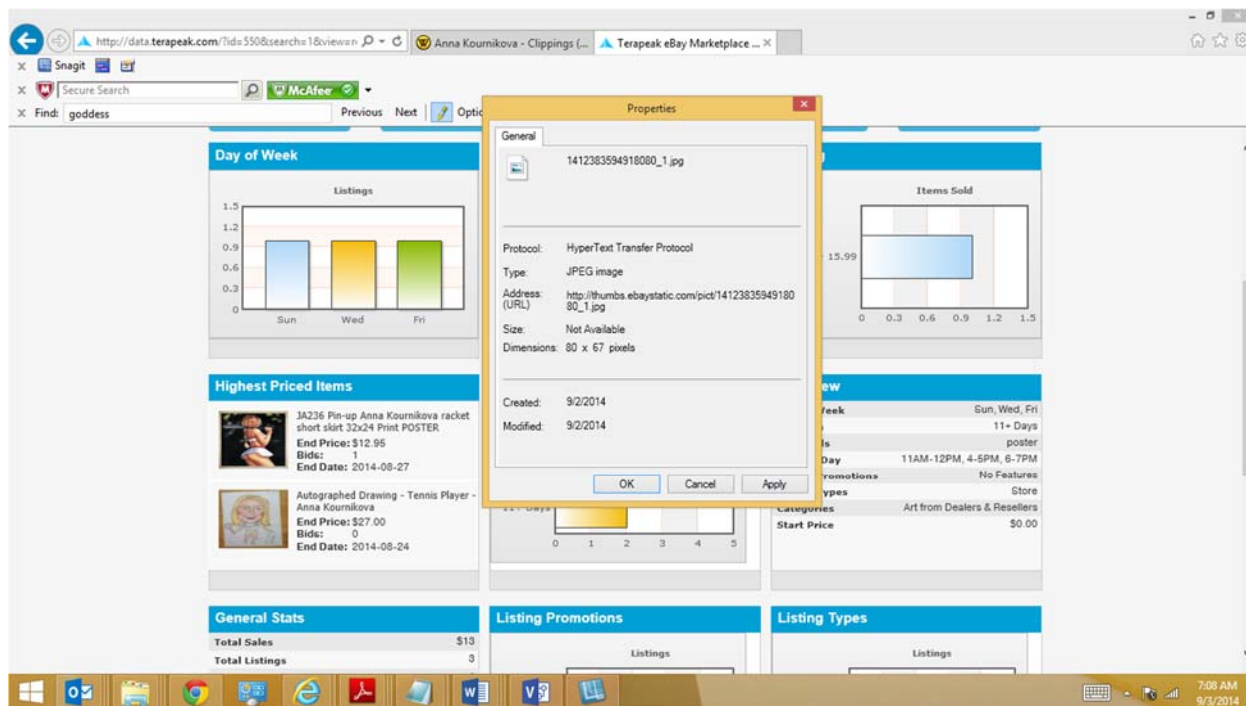


Exhibit G

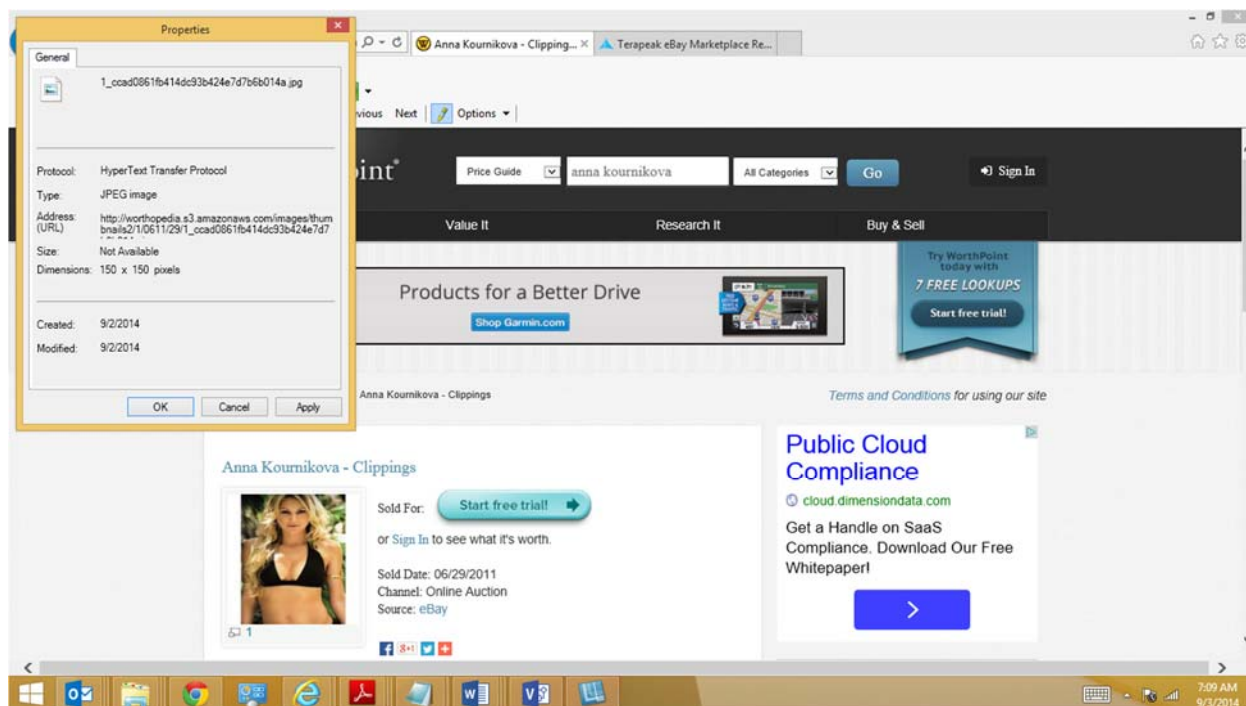


Exhibit H

